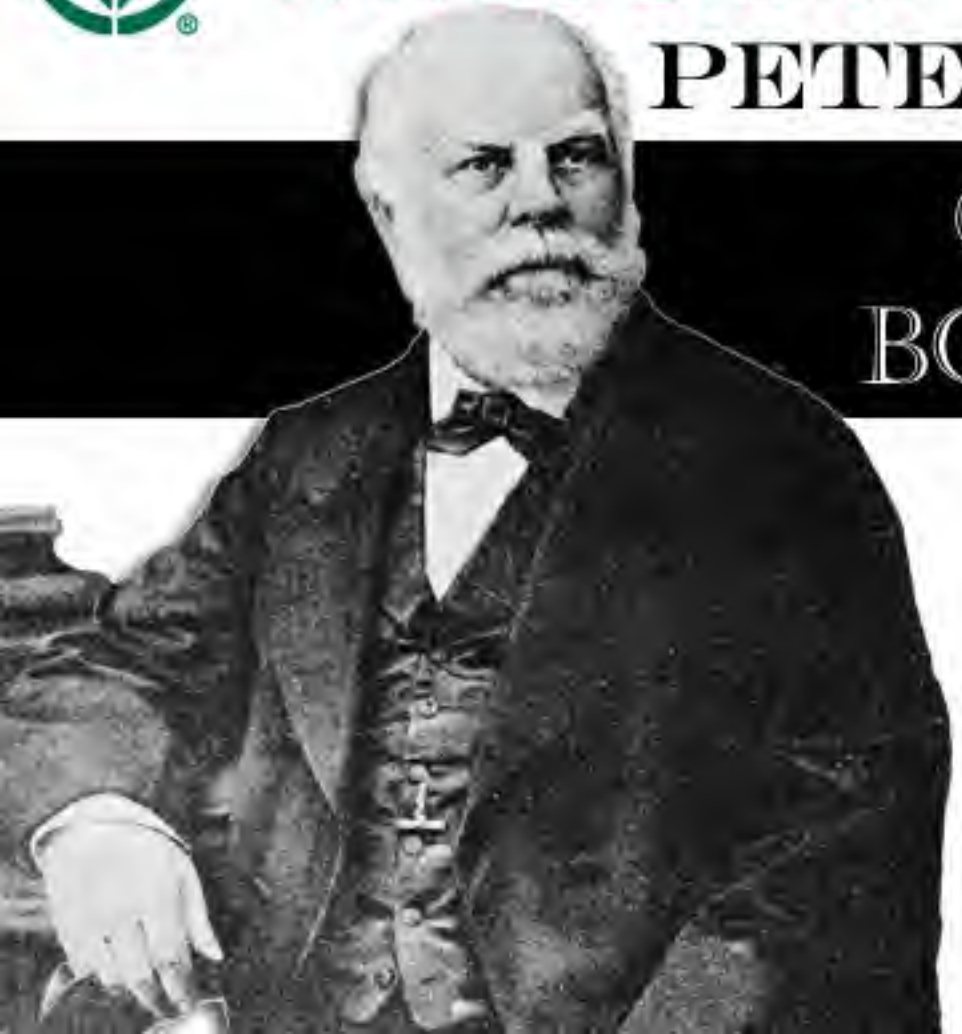
Missouri Botanical Garden
Peter H. Raven Library

George Engelmann Botanical Notebooks



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Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

14 Feb 62

P. mitis

305-318

0 1 2 3 4 5 6 7 8 9 10
cm
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MISSOURI BOTANICAL GARDEN

11280

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

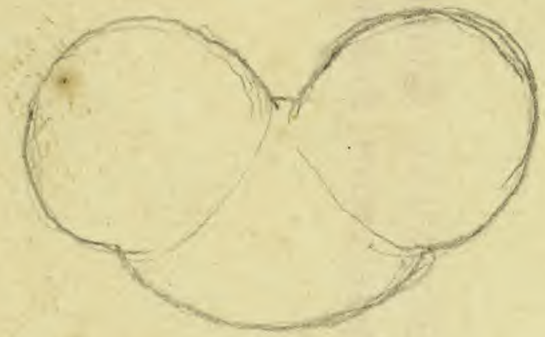
X415

Pinus mitis

Virginia W.G. Bischoff Leg. May 1852

Sept 15 1863

111
0.041
mean size



X4

inflorescence, terminal bud undeveloped

X10

X4

bract minute deciduous

10-11 bracts

0.035~ 0.039~0.042

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JONES & LEITCH
Druggists
Cor. Fifth & Market Sts. St. LOUIS, Mo.

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X415

0.028

0.030

0.034

0.035

Pinus mitis

Pilot Knob, Mo, 9th Sept. 1859

St Louis Sept 18. 1863

X4

X10

Disepiment of anther cells very conspicuous = Mobile flat

X4

X2

yoz fruit 5 months old

Sept!

lateral

0.028-0.031 & 0.034-0.035

a single grain seen 0.040

(9-)10 involucral scales

very carefully made

11282

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Druggists

Cor. Fifth & Market Sts. St. LOUIS, Mo.

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George Engelmann Papers

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Vitis mitis
Perryville Mo
19 Oct. 1863

seed rough both sides
broad, ribbed on the
inner

single seed
examined 7 only

only one seed sown
long short and
broad, probably
from one of the
lower scales

Granite Quarry
near Pilot Knob, Mo Nov. 1863
13 Nov 1863

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JONES & LEITCH, DRUGGISTS

COR. FIFTH & MARKET STREETS,

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J. McKittrick & Co. Cor Main & Vine.

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GEORGE ENGELMANN PAPERS

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Pinus mitis
Mary Co.; New Can Cy
10 Nov 1865

HERBARIUM OF THE MISSOURI BOTANICAL GARDEN
ST. LOUIS, MISSOURI, U.S.A.

11284

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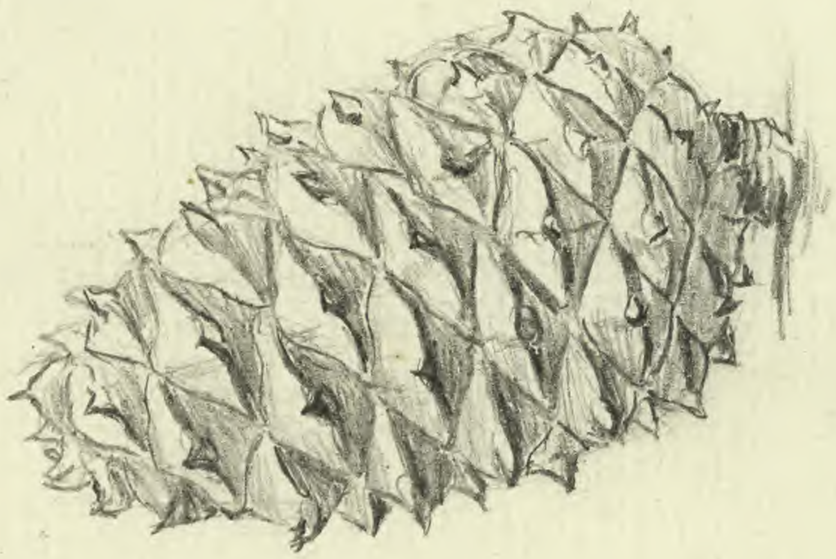
Pinus mitis

Pottsville Missouri, Platt 56
to Perryville

1863



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Pinus mitis ?

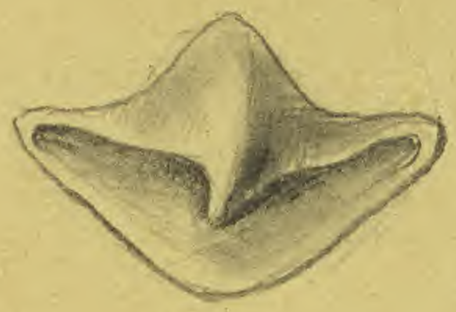
St Louis Sept 19 1863

Alabama, Buckley Sept 1841

X2

X10

side view



front view

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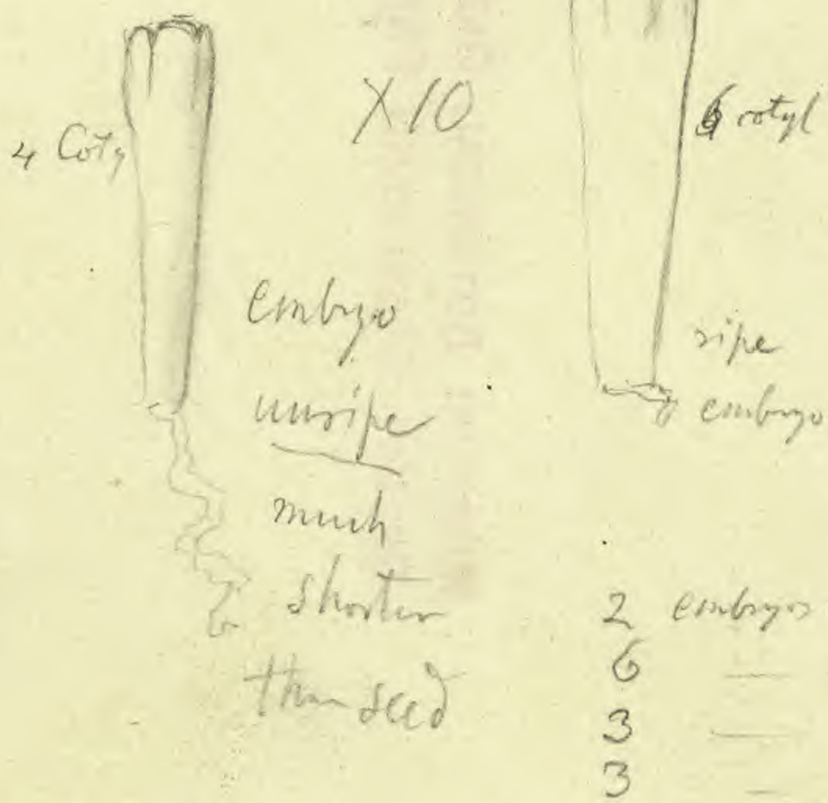
Pinus mitis

Nov. 12 1863

Maryland 1863, Canby



seed of old open cone

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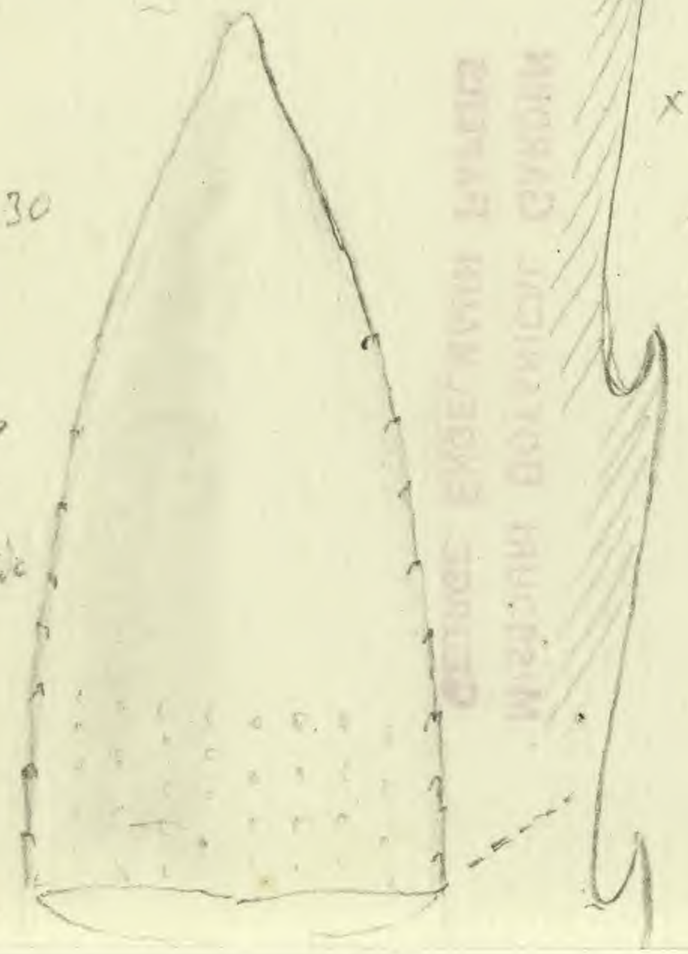
Pinn. Nitis Pilot knob Nov 1863 Nov 20 1863

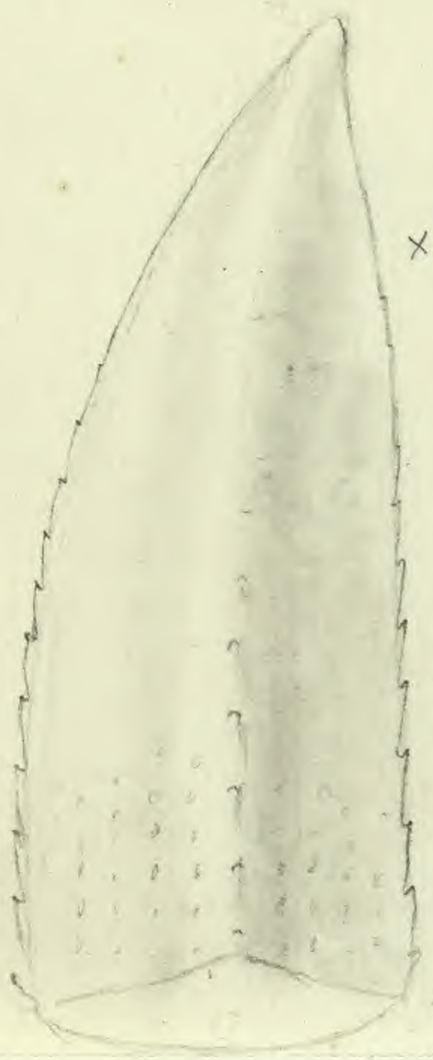
x 30



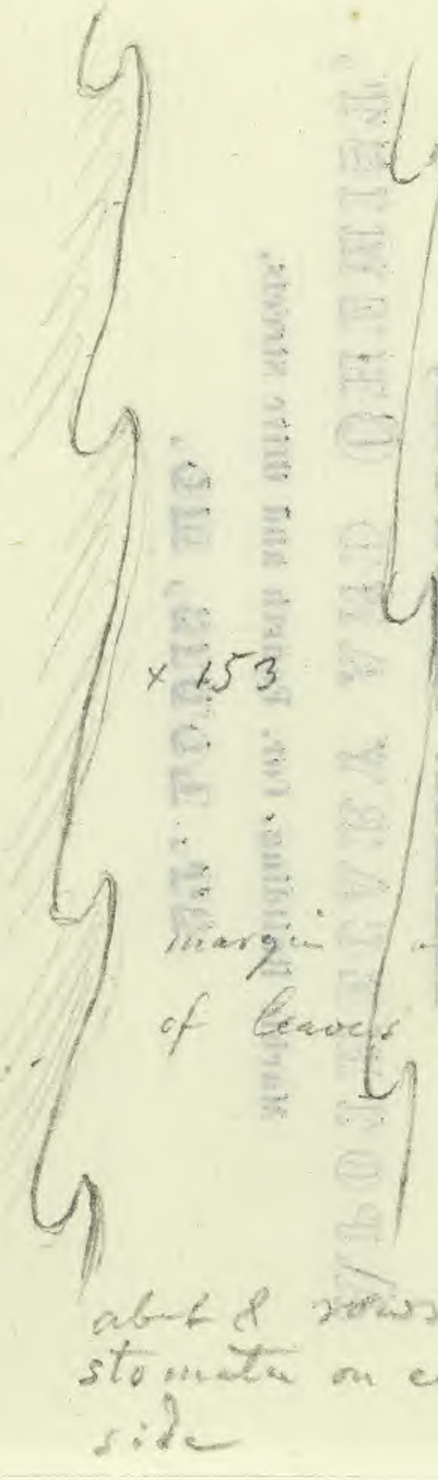
x 153

x 30

leaves
= 2 =
upper side



x 30



x 153

x 153

margin of leaves = serrate

abt 8 rows of stomata on each side

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Pinus mitis
Aiken

March 30 1871

S. Carol, Ravenel Num 1870

longer leaves 4–5" long

mostly 3"

×30

×30

×30

×30

Diameter of Carpet Leaf

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cm
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DRUGGISTS

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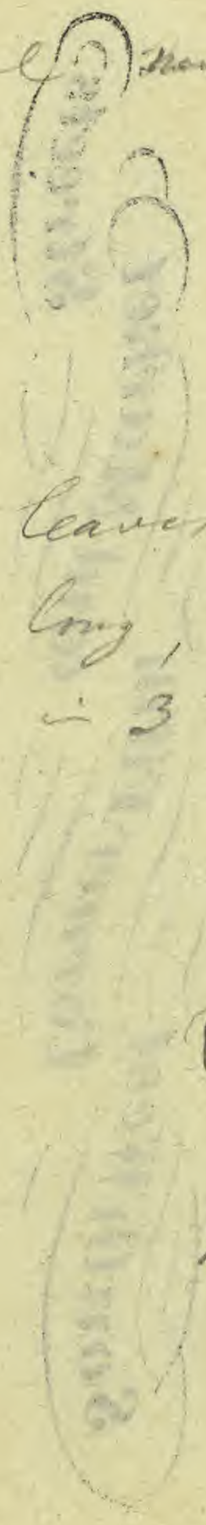
Pinus mitis

Dr Mellichamp., Bluffton, Aug. 1870

March 30 1871

Raven Run Mar 1870



Leaves 3–5 lines long, more frequently in 3's than in 2's

Sheath of young cone in the fall

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cm
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DRUGGISTS

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Pinus mitis

Bluffton S.C. D Millichamp. March 28 1871

April 4th 1871

fresh leaves from same

Gamblet

x30

x30 x60 x30

a ternate leaf

x30

a binate leaf

x60

x30

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May 22 1878

Pin. mitis

2-foliis,

S. Carol. & Mellichamp

Deposit 1878

very little scattered
hyposodous under
surface, none on
2 lateral ribs

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Pinus mitis

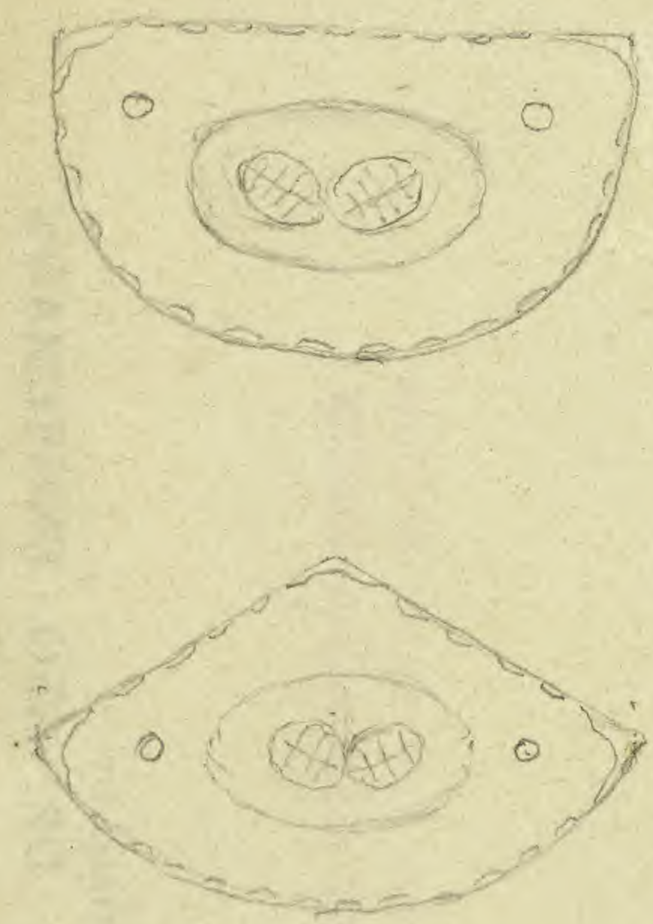
July 25 1878

Arcadia Florida

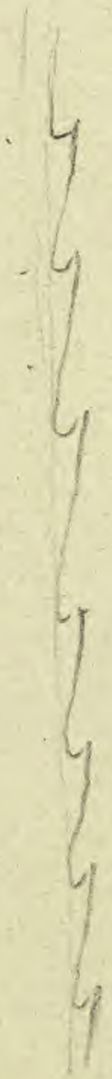
Mary Soulard, May 1878

(Fresh - Type)

×30



×60



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cm
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No. 3005 Olive Street,

Near Garrison Av. ST. LOUIS.

Prescription Store,

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Prescribed by

DR. GEO. ENGELMANN,

N. W. Cor. Garrison Ave. & Locust St.,

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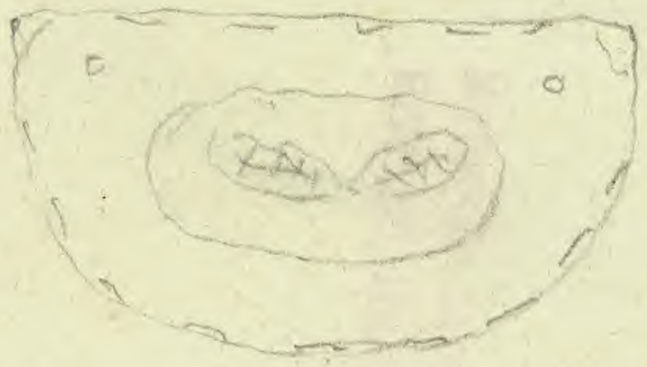
P. viridis

Florida August 1880

March 4 1880

×10



Strongly ribbed
in angles, and all
around, slightly ribbed
between

1184

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ENGELMANN PAPERS

10 Tab

63

P. glabra

319-329

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cm
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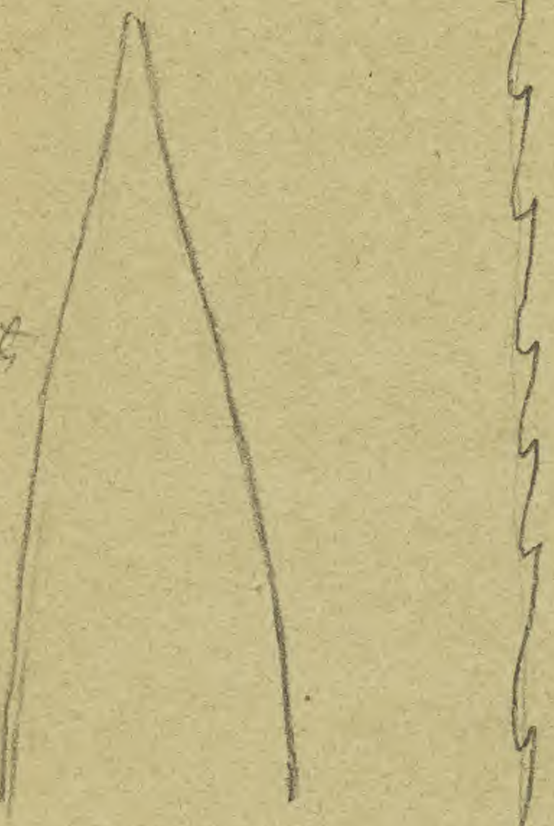
P. glabra
S. Carol Dr mulleinburg April 1878

May 22 1878

2 Extend parenchyma into
without hypoderm

slight, interrupted hypoderm all
all around leaf



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N. 2 Pinus glabra

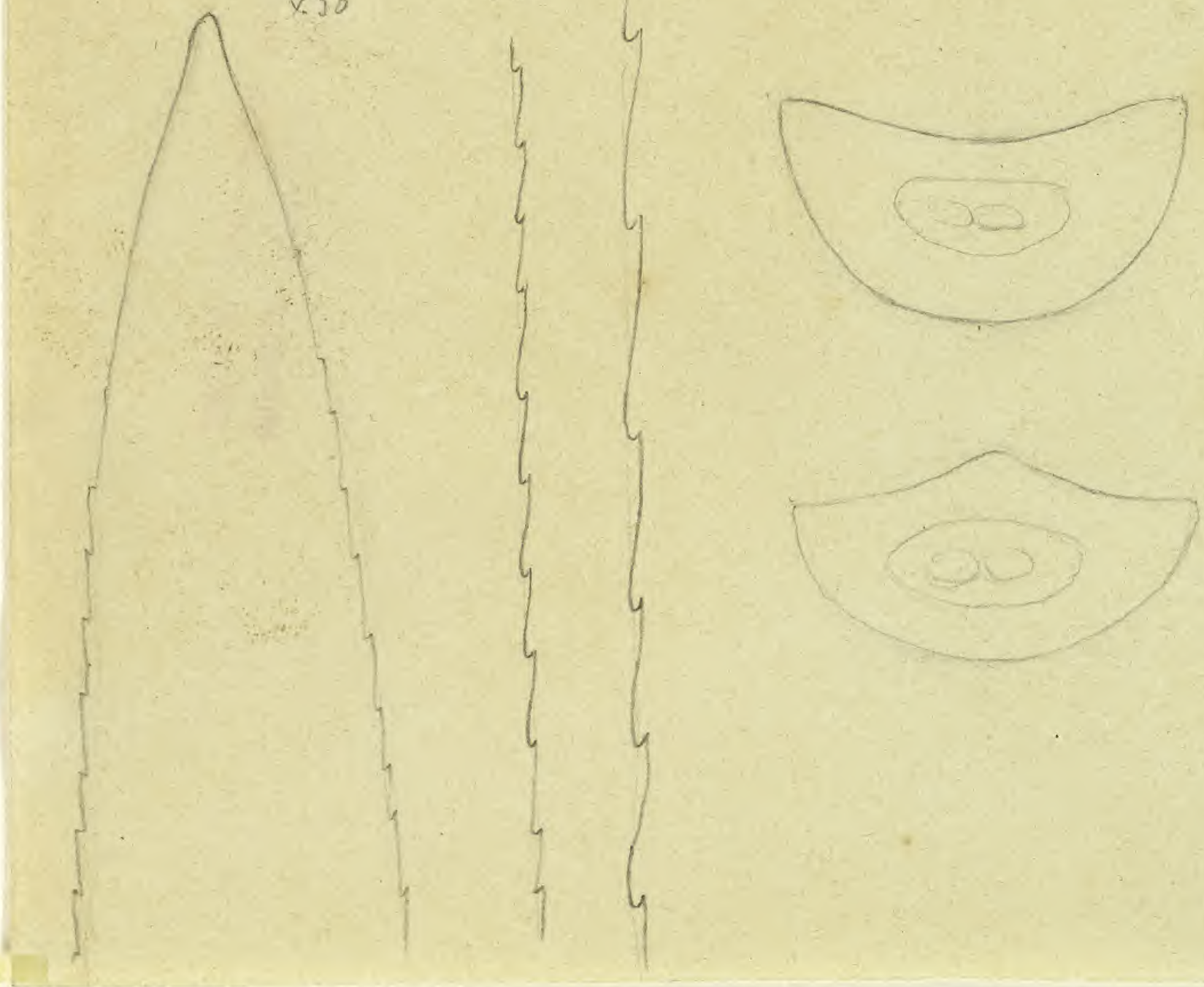
March 30 1871

Blountstown Dr Mellichamp Aug 1870

no label - leaves a little stouter, rarely ÷ 3 -

cones slightly ± prickly

x30 x30 x60



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Leitch & Corlies

DRUGGISTS

SouthWest Corner Fifth and Market Streets

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Pinus glabra Sept 24 1863

Charleston, Buckley Apiti

scales of young cone of last year

X10

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cm 0 1 2 3 4 5 6 7 8 9 10

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APOTHECARY & PHARMACEUTIST.
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

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N.1. Rhus glabra

March 30 1871

Bluffton & Middlehamp, Aug 1870

smooth bark, unarmed cones

generic?

x30 x30 x60

x30

often but not always dentículate to the point

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cm
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Leitch & Cories
CHRONOMETERS
South West Corner Fifth and Market Streets

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N. 1.

Pinus glabra

March 20 1871

Bluffton S.C. Dr Mellichamp 1870

fruiting spray

×30

× 30 ×60

×30

×30

rarely denticulate to lup.

11300

Eno, R. Swan & Co.

Pharmaceutists,

Apothecaries &

S. W. CORNER OF TWELFTH & OLIVE STREETS,

ST. LOUIS, MO.

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No. 2

Pinus glabra f. *da* Mellichamp

P. serotina ? Roezel

March 20 1871

Bluffton S. C. D Mellichamp 1870

x 30

x30

x60

x 30

x60

x30

rarely obtuse
x distinct

usual binary
very rarely ternary

largest binary leaves

0 1 2 3 4 5 6 7 8 9 10
cm
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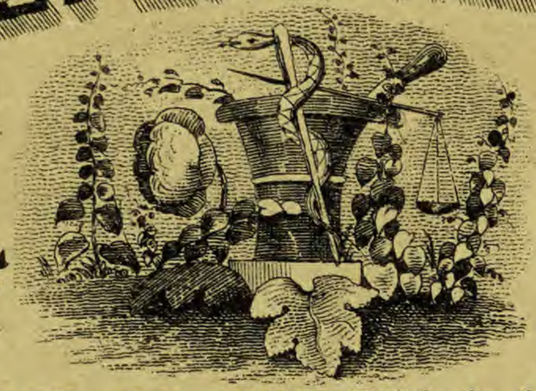

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11301

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Pinus glabra

S. Carolina 1869

May 8 1870

×10

5 × 6 cotyledons

×2

11302

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Successors to

Enno Sander & Co.,

PHARMACEUTISTS,

Walnut & Fourth Sts.,
SOUTHERN HOTEL,

Walnut & Second Sts.,
BARNUM'S HOTEL,

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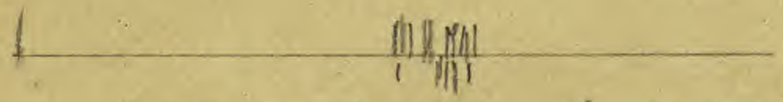
cm 0 1 2 3 4 5 6 7 8 9 10

Pinus glabra

Bluffton – S. C.

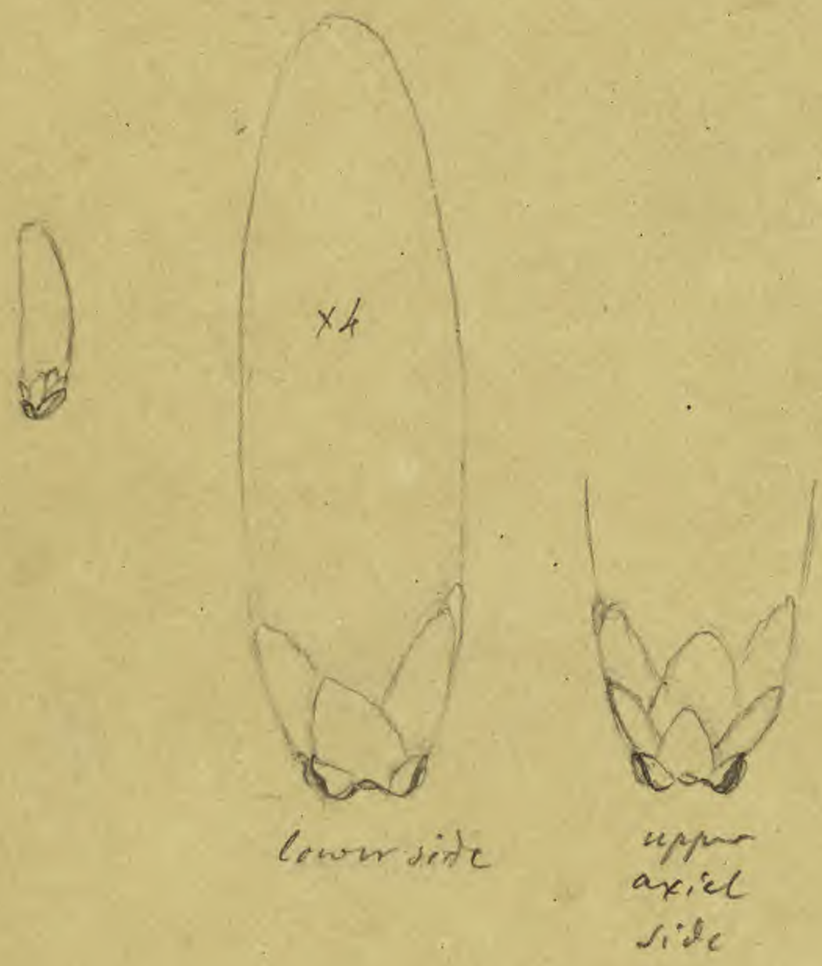
March 26 1871

Dr Mellichamp March 13th 1871



23–28, mostly 26–27 mm

415 415



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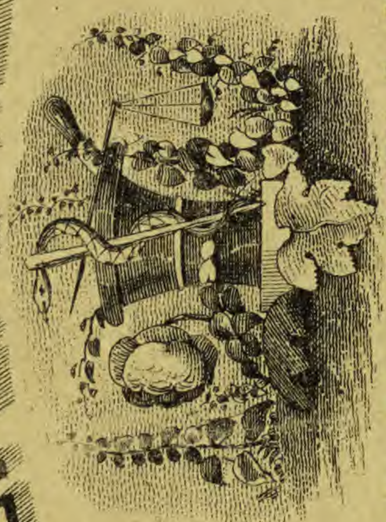
Pharmacists



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J.C. Wood. Olive St.

0 1 2 3 4 5 6 7 8 9 10
cm
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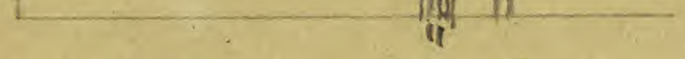
Pinus glabra

March 13 1871

Dr Millichamp Bluffton S.C. March 2?- 71

size of Pollen x 415



$\frac{24.5-27}{415}$, mostly $\frac{26}{415}$, rarely $\frac{30}{415}$ mm

ament, not quite mature

×10

×4

Inner side upper

Outer side of Cover

(12–14) 14 scales of involucre

bract ×4

0 1 2 3 4 5 6 7 8 9 10
cm
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11304

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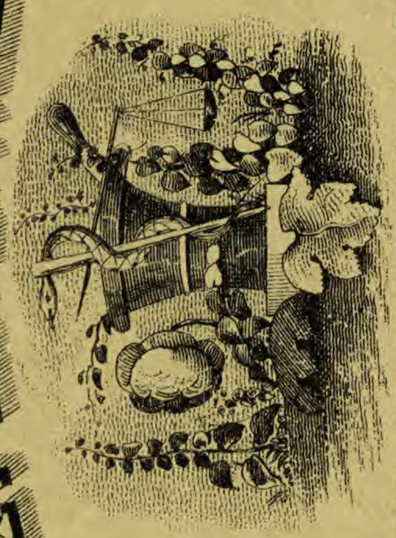

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Pharmaceutists.

Apothecaries &

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ST. LOUIS, MO.

J.C. Wood, Olive St.

0 1 2 3 4 5 6 7 8 9 10
cm
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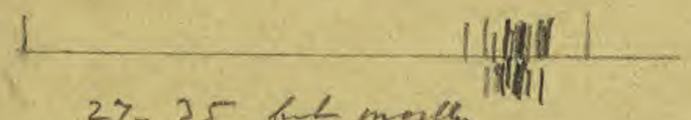
March 26 1871

Pinus glabra

Buckingham

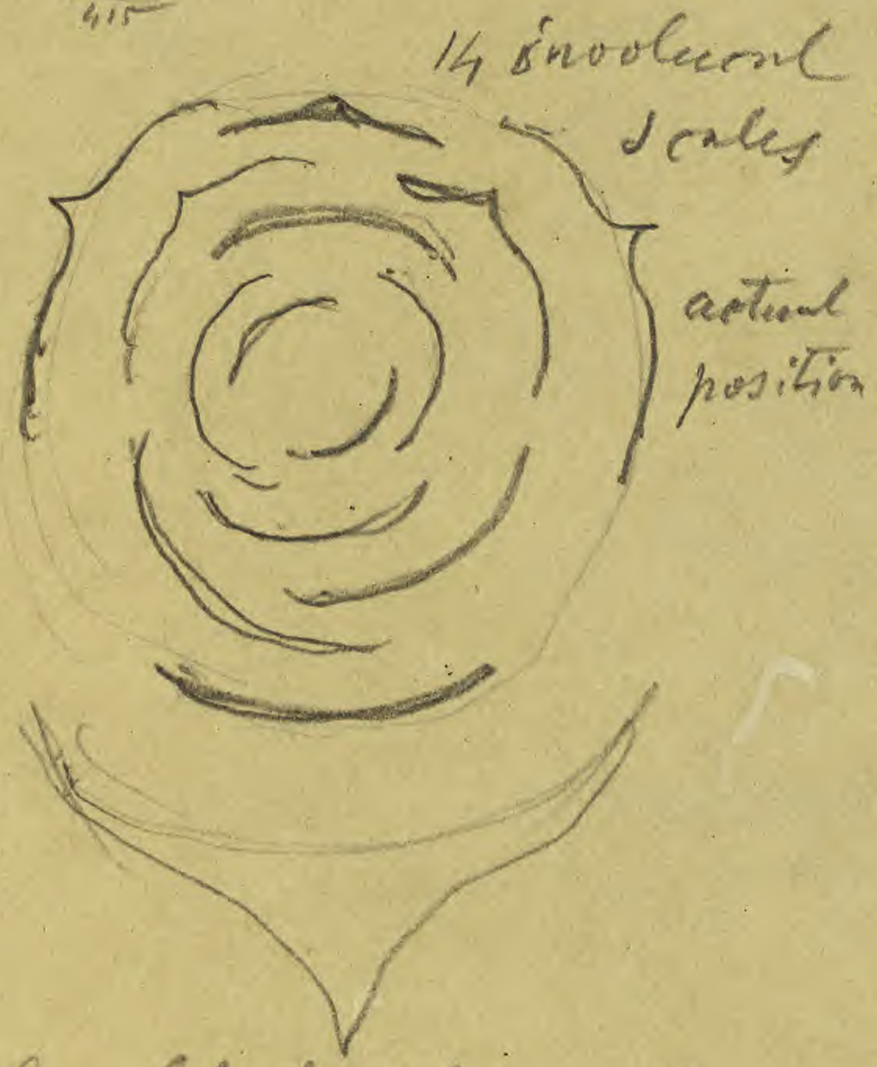
Bluffton S. C

Dr Mellichamp
March 14th 1871



27-35 bl mostly
between 28½ - 32½ or 30-31 mm
415 415

upper view



14 involucral scales

actual position

×4 lower lateral scales small scarcely ⅓ of the involucre or even ⅛

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cm
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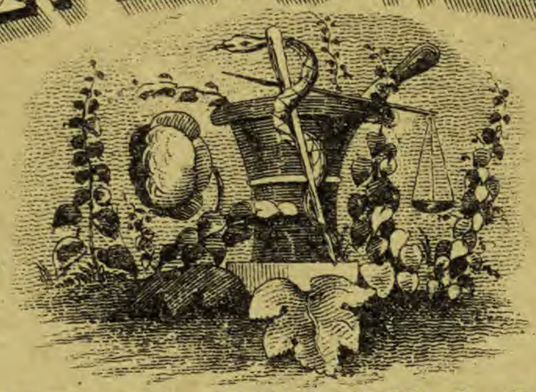
Apothecaries &  Pharmacents

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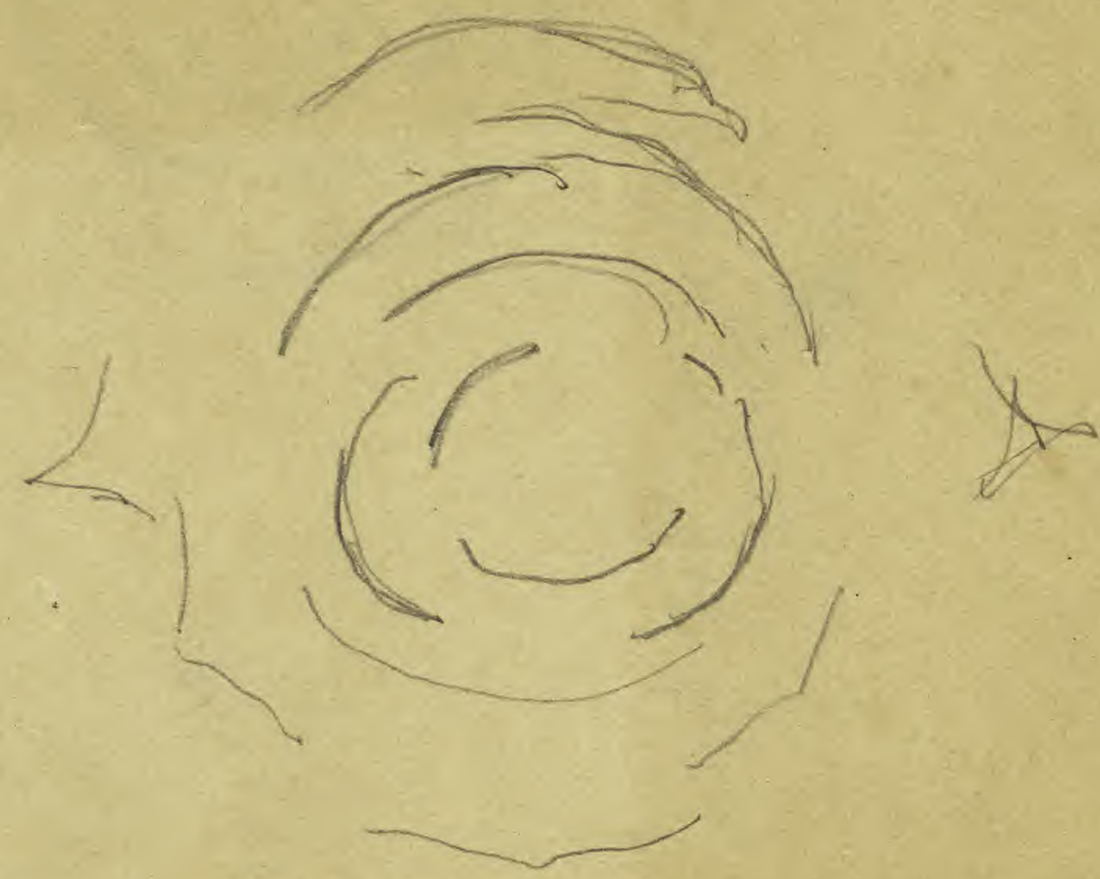

11305

cm 0 1 2 3 4 5 6 7 8 9 10
copyright reserved
MISSOURI BOTANICAL GARDEN

March 4 1880

Diglotea

Flowers, Sargent 1880

x 30

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

11306

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS